ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit) February 2002 PE NUMBER AND TITLE **BUDGET ACTIVITY** 5 - Engineering and manufacturing development 0604817A - Combat Identification FY 2002 FY 2003 FY 2006 FY 2007 FY 2001 FY 2004 FY 2005 Cost to Total Cost COST (In Thousands) Actual Estimate Estimate Estimate Estimate Estimate Estimate Complete Total Program Element (PE) Cost 6705 2989 1995 0 0 155116 0 0 0 0 123922 482 GROUND CID (BCIS) 3838 2989 1995 0 902 INDIVIDUAL COMBAT IDENTIFICATION 2867 31194 SYSTEM (ICIDS)

A. Mission Description and Budget Item Justification: The dominant maneuver tactics that allow smaller, more lethal forces to succeed on the modern battlefield also increase the potential for friendly fire casualties. Thus, a key enabler of complex warfare is the rapid, reliable identification of friends, foes, and neutrals. Positive identification at the point-of-engagement is complicated by the capabilities of modern weapons that allow engagements well beyond the range where visual identification is possible, significantly increasing the potential for fratricide. These programs are directed toward the design and development of distinct systems to help minimize this battlefield deficiency within the overall Combat Identification architecture. Project 482 addressed the ground-to-ground vehicle mounted mission and Project 902 addresses the individual soldier-to-soldier mission. Survivability is one of the seven tenets of the Army Transformation Strategy and these Combat Identification programs represent an integral part of that strategy as they work to reduce incidents of fratricide. These systems support the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP), as well as providing a critical link to ensuring compatibility and interoperability to the Future Combat System and to the Objective Warrior System.

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit) PE NUMBER AND TITLE

February 2002

BUDGET ACTIVITY

5 - Engineering and manufacturing development

0604817A - Combat Identification

B. Program Change Summary	FY 2001	FY 2002	FY 2003
Previous President's Budget (FY2002 PB)	5313	3014	0
Appropriated Value	5362	3014	0
Adjustments to Appropriated Value	0	0	0
a. Congressional General Reductions	0	-25	0
b. SBIR/STTR	-158	0	0
c. Omnibus or Other Above Threshold Reprogrammings	0	0	0
d. Below Threshold Reprogramming	1550	0	0
e. Rescissions	-49	0	0
Adjustments to Budget Years Since FY2002 PB	0	0	1995
Current Budget Submit (FY 2003 PB)	6705	2989	1995

Change Summary Explanation:

FY2001 - \$1.550M reprogrammed into Proj 482 to fund BCIS A-Kit effort

FY2003 - \$1.995M transferred from OPA2 (BA0515) to Proj 902 to support IOT

	ARMY RDT&E BUDGET ITEM JU	STIFI	CATIO	N (R-2	A Exhi	ibit)	Fe	ebruary 2	2002	
	ACTIVITY ineering and manufacturing development		PE NUMBER 0604817A			cation			PROJECT 902	
	COST (In Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
902	INDIVIDUAL COMBAT IDENTIFICATION SYSTEM (ICIDS)	286	7 2989	1995	0	0	0	0	0	31194

A. Mission Description and Budget Item Justification: The identification of friendly forces on future battlefields will be more complex due to the highly mobile, dispersed, non-linear formations found in unconventional warfare. The Individual Combat Identification System (ICIDS) is a lightweight, laser-based, question and answer type system, used by the individual soldiers to positively identify friendly soldiers. The system includes a compact, eyesafe laser interrogator, a laser detector assembly, an electronic processor unit, and an omni-directional RF responder. The laser interrogator includes an aiming laser pointer for aiming the soldier's weapon at night when using Night Vision Goggles and provides an embedded training capability that is interoperable with MILES/MILES 2000 training systems. The system will provide combat identification beyond the effective range of the weapon and will exceed the soldier's target acquisition capability under degraded atmospheric conditions. The system will also be directly interoperable and have a commonality and a migration path with the combat ID functions to be embedded in the Land Warrior equipment suite. The system will fulfill requirements stated in the Operational Requirements Document for use by Army, Marine and Special Operations Forces. Survivability is one of the seven tenets of the Army Transformation Strategy and ICIDS represents an integral part of that strategy as it works to reduce incidents of fratricide and increase combat effectiveness. This system supports the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP), as well as providing a critical link to ensuring compatibility and interoperability to the Objective Warrior System.

FY 2001 Accomplishments:

- Completed fabrication, assembly and test of 50 System Development and Demonstration (SDD) hardware systems to support technical testing.
- 487 Completed Phase II, Development Testing.
- Performed data reduction and analysis from government test.
- 324 Conducted Airborne Certification.

Total 2867

	MY RDT&E BUDGET ITEM JUS	•	February 2002
DGET ACTI Engineer	VITY ing and manufacturing development	PE NUMBER AND TITLE 0604817A - Combat Identification	PROJECT 902
		•	
2002 Plann 2039	ded Program Conduct Land Warrior Interoperability Study.		
450	Develop Computer Based Training.		
500	Continue Software Effort to Interface with Army Key M	Management System.	
al 2989			
	ed Program		
1600	Conduct Initial Operational Test and Evaluation (IOT&		
395	Perform data reduction and analysis from government t	est.	
al 1995			

ARMY RDT&E BUDGET ITEM	JUSTII	FICAT	ION (F	R-2A E	xhibit)		Febru	ary 2002		
BUDGET ACTIVITY 5 - Engineering and manufacturing development		PE NUMBER AND TITLE 0604817A - Combat Identification				n	PROJECT 902			
		•			ı					
B. Other Program Funding Summary	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Compl	Total Cost	
OPA2, SSN BA0515 Combat ID/Aiming Light	10939	10423	0	(C	0	0	0	21362	

C. Acquisition Strategy: A competitive, cost plus incentive fee (CPIF) contract for the design, fabrication and testing of 50 units was awarded in July 1997. A follow-on Fixed Price (FP), sole source, Low Rate Initial Production (LRIP) contract, based on demonstrated technical test results, was awarded in September 2001 to provide an orderly ramp up to production.

D. Schedule Profile	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Complete fabrication of 50 hardware systems	1Q						
Development Test, Phase II	1-2Q						
Airborne Certification	3Q						
Milestone C	4Q						
LRIP Award	4Q						
Initial Operational Test & Evaluation (IOT&E)			4Q				

ARMY RDT&E COST ANALYSIS(R-3) February 2002 PE NUMBER AND TITLE **BUDGET ACTIVITY** PROJECT 5 - Engineering and manufacturing development 0604817A - Combat Identification 902 FY 2001 FY 2001 FY 2002 FY 2002 FY 2003 FY 2003 Target I. Product Development Contract Performing Activity & Total Cost To Total Method & Location PYs Cost Cost Award Cost Award Cost Award Complete Cost Value of Type Date Date Date Contract General Dynamics, 994 10 21973 a. Hardware C/CPIF 20979 0 0 21973 Scottsdale, AZ b. Land Warrior C/CPIF General Dynamics, 0 1860 10 1860 1860 Interoperability Effort Scottsdale, AZ 994 0 20979 1860 23833 23833 Subtotal: Remarks: General Dynamics purchased Motorola's Integrated Information Systems Group in 2001. II. Support Cost Performing Activity & Contract Total FY 2001 FY 2001 FY 2002 FY 2002 FY 2003 FY 2003 Cost To Total Target Method & Location PYs Cost Cost Award Cost Award Cost Award Complete Value of Cost Date Date Date Contract Type a. Sys Eng/Tech Assist 0 1345 C/T&M Misc 120 450 1Q 775 1Q 1345 b. Matrix Support MIPR Misc 641 153 1-20 140 1-20 118 10 0 1052 1052 761 603 915 118 0 2397 2397 Subtotal:

	ARM	IY RDT&E CO	ST AN	IALYS	IS(R-3))			Febi	ruary 200	2	
BUDGET ACTIVITY 5 - Engineering and 1	nanufactu	ring development			имвек ani 4817A - С		entificati	on			PROJEC 902	T
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Test Planning/Execution	MIPR	CECOM, ATEC, WSMR, SLAD, etc	804	330	1Q	0		150	1Q	0	1284	1284
b . Development Test, Phase I, II	MIPR	WSMR, OTC, ATEC, etc	0	679	1Q	0		0		0	679	679
c . IOTE	MIPR	ATEC, OTC	0	0		0		1600	1Q	0	1600	1600
Subtotal:			804	1009		0		1750		0	3563	3563
Subtotal:			804	1009		0		1750		0	3563	3563
Subtotal: IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	1009 FY 2001 Cost	FY 2001 Award Date	0 FY 2002 Cost	FY 2002 Award Date	1750 FY 2003 Cost	FY 2003 Award Date	Cost To Complete	3563 Total Cost	Target Value of
			Total	FY 2001	Award	FY 2002	Award	FY 2003	Award	Cost To	Total	Target
IV. Management Services	Method &	Location	Total PYs Cost	FY 2001 Cost	Award Date	FY 2002 Cost	Award Date	FY 2003 Cost	Award Date	Cost To Complete	Total Cost	Target Value of Contract
IV. Management Services a . Program Management	Method &	Location	Total PYs Cost 799	FY 2001 Cost 261	Award Date	FY 2002 Cost	Award Date	FY 2003 Cost 127	Award Date	Cost To Complete	Total Cost 1401	Target Value of Contract 1401